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August 23, 2005

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Re: Correction of Mistake in Printed Patent
Under §1480 of the Manual of Patent
Examining Procedures
U.S. Patent No.: 6,919,347
Date of Patent: July 19, 2005
Inventor(s): Ohlmeyer et al.
Our File No.: 1073.035A

*Certificate
AUG 29 2005
of Correction*

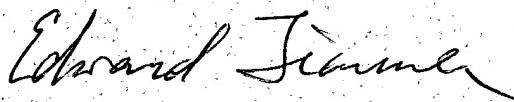
Dear Sir:

Upon proofreading the sealed patent, we noticed errors made by the Patent Office.

Transmitted herewith is a proposed Certificate of Correction effecting a corrective amendment.

The patentee respectfully solicits the granting of the requested Certificate of Correction.

Respectfully submitted,



Edward Timmer, Esq.
Registration No. 46,248
Attorney for Applicants

ET/cma
Enclosure

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. 6,919,347
DATED July 19, 2005
INVENTOR(S) Ohlmeyer et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

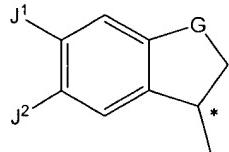
Claim 13

Col. 282, line 26, delete "A is R⁴R⁵N-(O)-;" and insert --A is R⁴R⁵N-C(O)--

Claim 14

Col. 283, lines 26 thru 32 structure

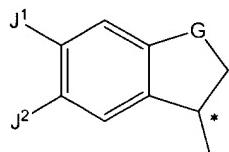
Delete current structure and replace with



Claim 15

Col. 284, lines 5 thru 10 structure

Delete current structure and replace with



Claim 16

Col. 284, line 28, delete “A¹ is R⁴R⁵N—C(O)—;” and insert --A¹ is R⁴R⁵N—C(O)—--

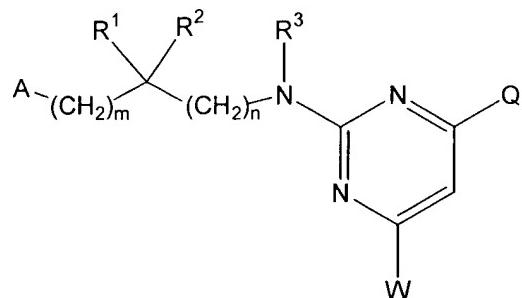
Claim 19

Col. 286, line 21, delete “C—C₃” in the second instance and insert —C₁—C₃

Claim 26

Col. 288, lines 3 thru 10 structure

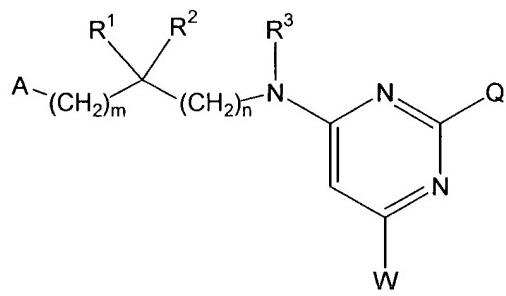
Delete current structure which has a “.” after the letter “Q”, and replace with



Claim 31

Col. 288, lines 57 thru 64

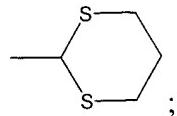
Delete current structure which has a “.” after the letter “Q”, and replace with



Claim 62

Col. 295, lines 41 thru 48

Delete current structure and replace with



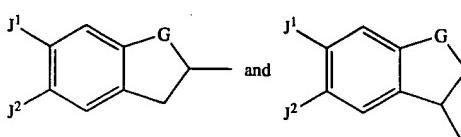
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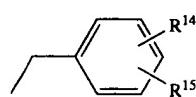
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⁵
R⁹ is

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wherein J¹ and J² are independently chosen from H, F, Cl, CN, NO₂ and CH₃, and G is chosen from —CH₂—, 10 —CH₂CH₂—, —CH₂CH₂CH₂—, —OCH₂—, —CH₂O—, —CH₂CH₂O—, —OCH₂CH₂—, —O—, —N(lower alkyl)–, —N(lower alkyl)CH₂—, —CH₂N(lower alkyl)–, —S—, —SO—, —SO₂—, —CH₂S—, —SCH₂—, —CH₂SO—, —SOCH₂—, —CH₂SO₂—, and 15 —SO₂CH₂—;

R⁵ is H or C₁–C₃-alkyl, with the proviso that both R³ and R⁵ cannot be alkyl; 20

R⁶ is aryl;

R⁷ is aryl or C₁–C₃-alkylaryl;

R⁸ is chosen from alkyl, aryl, heteroaryl, substituted alkyl, C₁–C₄-alkylaryl, C₁–C₄-alkylheterocycl and C₁–C₄-alkylheteroaryl; 25

R⁹ is chosen from H, alkyl, alkenyl, substituted alkyl, cycloalkyl, aryl, alkoxy, heteroaryl, fluoroalkyl, C₁–C₄-alkylcycloalkyl, (C₁–C₄-alkoxy)alkyl, (C₁–C₄-alkoxycarbonyl)alkyl, (C₁–C₄-alkylthio)alkyl, 30 heterocycl, C₁–C₄-alkylheterocycl, C₁–C₄-alkylaryl, and C₁–C₄-alkylheteroaryl;

R¹⁰ is H or C₁–C₃-alkyl; or

R⁹ and R¹⁰ taken together may form a 5- to 7-membered 35 ring structure optionally containing O, S, SO, SO₂ or NR¹², said ring optionally substituted with —OH, CN, —COOH or —COOCH₃;

R¹¹ is aryl;

R¹² is chosen from H, C₁–C₃-alkyl, alkoxy carbonyl, methoxyacetyl and aryl; 40

R¹³ is chosen from —OH, —OTHP, 1-imidazolyl, and 1-pyrrolyl;

m is zero or one; and 45

n is zero or one, with the proviso that when A is A², m and n cannot both be zero.

10. A 2-pyrimidinamine according to claim 9 wherein Q is chosen from imidazolyl, pyrrolyl, pyridinyl, fluorophenyl and 50 2-thienyl.

11. A 2-pyrimidinamine according to claim 10 wherein

A is R⁴R⁵N—C(O)—;

W is H, Cl, NHR⁹ or OR⁸;

R¹ is chosen from alkyl and C₁–C₃-alkylcycloalkyl; 55

R², R³ and R⁵ are H;

R⁴ is C₁–C₄-alkylaryl or C₁–C₄-alkylheteroaryl;

R⁸ is C₁–C₄-alkylaryl;

R⁹ is chosen from hydrogen, alkyl, fluoroalkyl, (C₁–C₄-alkoxy)alkyl, (C₁–C₄-alkylthio)alkyl, C₁–C₄-alkylcycloalkyl, C₁–C₄-alkylaryl, heterocycl, C₁–C₄-alkylheteroaryl, C₁–C₄-alkylheterocycl; and 60

m and n are zero.

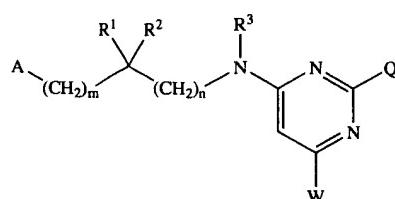
12. A 2-pyrimidinamine according to claim 11 wherein W is NHR⁹ and 65

wherein

R¹⁴ is chosen from H, F, Cl, CN, NO₂, SO₂NH₂, CF₃, COOCH₃, OCH₃, SO₂CH₃, N(CH₃)₂ and COOH; and

R¹⁵ is chosen from H, OCH₃ and Cl.

13. A compound of formula



wherein:

A is R⁴R⁵N—(O)—;

Q is chosen from imidazolyl and pyrrolyl;

W is NHR⁹;

R¹ is chosen from cyclohexylmethyl; 2-methylpropyl and 3-methyl-1-butyl;

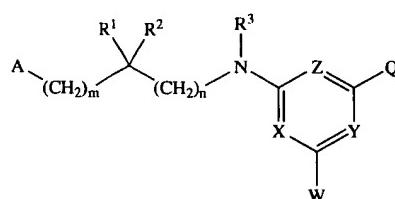
R², R³ and R⁵ are H;

R⁴ and R⁹ are benzyl or substituted benzyl;

m is zero; and

n is zero.

14. A compound of formula

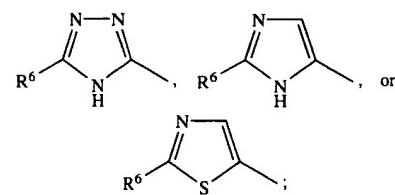


wherein:

two of X, Y and Z are N and the other of X, Y and Z is CH;

A is A¹ or A²;

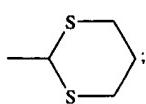
A¹ is R⁴R⁵N—C(O)—,



A² is chosen from R⁷C(O)NH—, R⁷S(O)₂NH—, R⁴NH—, and R⁴O—;

Q is chosen from heteroaryl, aryl, —CH₂R¹³, —CH=NR¹³—OCH₃ and

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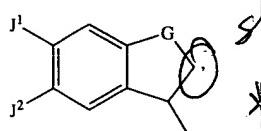
W is chosen from H, Cl, F, R⁸, C₁-C₄-alkylaryl, —OR⁸, —SR⁸, —NR⁹R¹⁰ and —NHC(O)R¹¹, with the proviso that when Q is imidazolyl, W is not H, Cl, F or R⁸;

R¹ is chosen from alkyl, cycloalkyl, alkenyl, C₁-C₃-alkylcycloalkyl, heterocyclyl, C₁-C₃-alkylheterocyclyl, aryl, C₁-C₃-alkylaryl, heteroaryl, C₁-C₃-alkylheteroaryl, (C₁-C₃-alkyloxy)alkyl, (C₁-C₃-alkyloxy)cycloalkyl, (C₁-C₃-alkylthio)alkyl, (C₁-C₃-alkylthio)cycloalkyl and (C₁-C₃-alkylsulfonyl)alkyl;

R² is H or C₁-C₃-alkyl, or R¹ and R² taken together form a 5- to 7-membered ring structure optionally containing O, S or NR¹²;

R³ is H or C₁-C₆-alkyl, or, when n is zero, R² and R³ taken together may form a 6-membered ring, which may be fused to a six-membered saturated or aromatic carbocycle;

R⁴ is



having the R configuration at the carbon indicated with an asterisk, wherein J¹ and J² are independently chosen from H, F, Cl, CN, NO₂ and CH₃, and G is chosen from —CH₂—, —CH₂CH₂—, —CH₂CH₂CH₂—, —OCH₂—, —CH₂O—, —CH₂CH₂O—, —OCH₂CH₂—, —O—, —N(lower alkyl)—, —N(lower alkyl)CH₂—, —CH₂N(lower alkyl)—, —S—, —SO—, —SO₂—, —CH₂S—, —SCH₂—, —CH₂SO—, —SOCH₂—, —CH₂SO₂—, and —SO₂CH₂—;

R⁵ is H or C₁-C₃-alkyl, with the proviso that both R³ and R⁵ cannot be alkyl;

R⁶ is aryl;

R⁷ is aryl or C₁-C₃-alkylaryl;

R⁸ is chosen from alkyl, aryl, heteroaryl, substituted alkyl, C₁-C₄-alkylaryl, C₁-C₄-alkylheterocyclyl and C₁-C₄-alkylheteroaryl;

R⁹ is chosen from H, alkyl, alkenyl, substituted alkyl, cycloalkyl, aryl, alkoxy, heteroaryl, fluoroalkyl, C₁-C₄-alkylcycloalkyl, (C₁-C₄-alkyloxy)alkyl, (C₁-C₄-alkoxycarbonyl)alkyl, (C₁-C₄-alkylthio)alkyl, heterocyclyl, C₁-C₄-alkylheterocyclyl, C₁-C₄-alkylaryl, and C₁-C₄-alkylheteroaryl;

R¹⁰ is H or C₁-C₃-alkyl; or

R⁹ and R¹⁰ taken together may form a 5- to 7-membered ring structure optionally containing O, S, SO, SO₂ or NR¹², said ring optionally substituted with —OH, —CN, —COOH or —COOCH₃;

R¹¹ is aryl;

R¹² is chosen from H, C₁-C₃-alkyl, alkoxy carbonyl, methoxyacetyl and aryl;

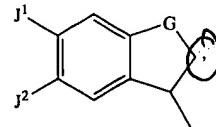
R¹³ is chosen from —OH, —OTHP, 1-imidazolyl, and 1-pyrrolyl;

m is zero or one; and

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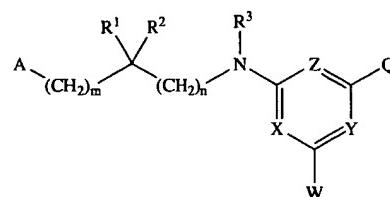
n is zero or one, with the proviso that when A is A², m and n cannot both be zero.

15. A pyrimidine according to claim 9 wherein R⁴ is



having the R configuration at the carbon indicated with an asterisk.

16. A compound of formula



wherein:

two of X, Y and Z are N and the other of X, Y and Z is CH;

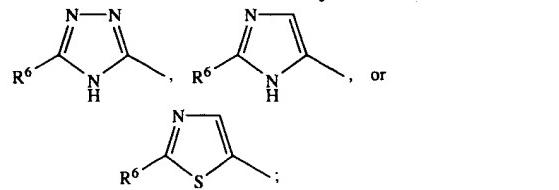
A is A¹ or A²;

A¹ is R⁴R⁵N—C(O)—;

A² is R⁷C(O)NH—, R⁷S(O)₂NH—,

R⁴NH—, and R⁴O—;

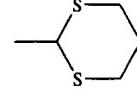
Q is chosen from aryl, —CH₂R¹³, —CH=N—OCH₃ and



A² is chosen from R⁷C(O)NH—, R⁷S(O)₂NH—,

R⁴NH—, and R⁴O—;

Q is chosen from aryl, —CH₂R¹³, —CH=N—OCH₃ and



heteroaryl other than 1-imidazolyl and 1-triazolyl;

W is chosen from H, Cl, F, R⁸, C₁-C₄-alkylaryl, —OR⁸, —SR⁸, —NR⁹R¹⁰ and —NHC(O)R¹¹, with the proviso that when Q is imidazolyl, W is not H, Cl, F or R⁸;

R¹ is chosen from alkyl, cycloalkyl, alkenyl, C₁-C₃-alkylcycloalkyl, heterocyclyl, C₁-C₃-alkylheterocyclyl, aryl, C₁-C₃-alkylaryl, heteroaryl, C₁-C₃-alkylheteroaryl, (C₁-C₃-alkyloxy)alkyl, (C₁-C₃-alkyloxy)cycloalkyl, (C₁-C₃-alkylthio)alkyl, (C₁-C₃-alkylthio)cycloalkyl and (C₁-C₃-alkylsulfonyl)alkyl;

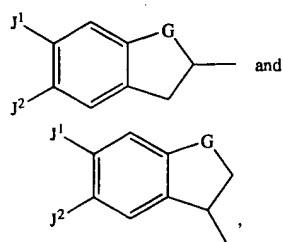
R² is H or C₁-C₃-alkyl, or R¹ and R² taken together form a 5- to 7-membered ring structure optionally containing O, S or NR¹²;

R³ is H or C₁-C₆-alkyl, or, when n is zero, R² and R³ taken together may form a 6-membered ring, which may be fused to a six-membered saturated or aromatic carbocycle;

R⁴ is chosen from H, aryl, heteroaryl, C₁-C₄-alkyl substituted with from one to three aryl or heteroaryl

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residues,



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wherein J^1 and J^2 are independently chosen from H, F, Cl, CN, NO_2 and CH_3 , and G is chosen from $-\text{CH}_2-$, $-\text{CH}_2\text{CH}_2-$, $-\text{CH}_2\text{CH}_2\text{CH}_2-$, $-\text{OCH}_2-$, $\text{CH}_2\text{O}-$, $-\text{CH}_2\text{CH}_2\text{O}-$, $-\text{OCH}_2\text{CH}_2-$, $-\text{O}-$, $-\text{N}(\text{lower alkyl})-$, $-\text{N}(\text{lower alkyl})\text{CH}_2-$, $-\text{CH}_2\text{N}(\text{lower alkyl})-$, $-\text{S}-$, $-\text{SO}-$, $-\text{SO}_2-$, $-\text{CH}_2\text{S}-$, $-\text{SCH}_2-$, $-\text{CH}_2\text{SO}-$, $-\text{SOCH}_2-$, $-\text{CH}_2\text{SO}_2-$, and $-\text{SO}_2\text{CH}_2-$;

R^5 is H or C_1-C_3 -alkyl, with the proviso that both R^3 and R^5 cannot be alkyl;

R^6 is aryl;

R^7 is aryl or C_1-C_3 -alkylaryl;

R^8 is chosen from alkyl, aryl, heteroaryl, substituted alkyl, C_1-C_4 -alkylaryl, C_1-C_4 -alkylheterocyclyl and C_1-C_4 -alkylheteroaryl;

R^9 is chosen from H, alkyl, alkenyl, substituted alkyl, cycloalkyl, aryl, alkoxy, heteroaryl, fluoroalkyl, C_1-C_4 -alkylcycloalkyl, (C_1-C_4 -alkoxy)alkyl, (C_1-C_4 -alkoxycarbonyl)alkyl, (C_1-C_4 -alkylthio)alkyl, heterocyclyl, C_1-C_4 -alkylheterocyclyl, C_1-C_4 -alkylaryl, and C_1-C_4 -alkylheteroaryl;

R^{10} is H or C_1-C_3 -alkyl, or

R^9 and R^{10} taken together may form a 5- to 7-membered ring structure optionally containing O, S, SO, SO_2 or NR^{12} , said ring optionally substituted with $-\text{OH}$, $-\text{CN}$, $-\text{COOH}$ or $-\text{COOCH}_3$;

R^{11} is aryl;

R^{12} is chosen from H, C_1-C_3 -alkyl, alkoxy carbonyl, methoxyacetyl and aryl;

R^{13} is chosen from $-\text{OH}$, $-\text{OTHP}$, 1-imidazolyl, and 1-pyrrolyl;

m is zero or one; and

n is zero or one, with the proviso that when A is A^2 , m and n cannot both be zero.

17. A 4-pyrimidinamine according to claim 16, wherein Z is CH, having the formula

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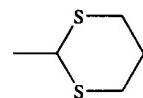
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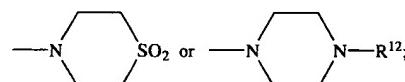


19. A 4-pyrimidinamine according to claim 18 wherein:

Q is chosen from pyrrol-1-yl, imidazol-1-yl, furan-3-yl, 2-methylimidazol-1-yl and 4-methylimidazol-1-yl;

A is $R^4R^5\text{N}-\text{C}(\text{O})-$;

W is Cl, NRH^9 , $\text{N}(\text{CH}_3)\text{R}^9$, OR^8 , SR^8 , R^8 , morpholin-4-yl,



R^1 is chosen from alkyl, cycloalkyl, C_1-C_3 -alkylaryl, C_1-C_3 -alkylcycloalkyl, $C-C_3$ -alkylheterocyclyl, C_1-C_3 -alkylheteroaryl;

R^2 , R^3 and R^5 are H;

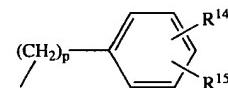
R^8 is C_1-C_4 -alkylaryl;

R^9 is chosen from hydrogen, alkyl, substituted alkyl, (C_1-C_4)-alkoxy, C_1-C_4 -alkylcycloalkyl, C_1-C_4 -alkylaryl, heterocyclyl, C_1-C_4 -alkylheterocyclyl, C_1-C_4 -alkylheteroaryl, and C_1-C_4 -alkylheterocyclyl; and

m and n are zero.

20. A 4-pyrimidinamine according to claim 19 wherein W is NHR^9 and

R^9 is chosen from hydrogen; methyl; ethyl; 2,2,2-trifluoroethyl; allyl; cyclopropyl; 2-cyanoethyl; propargyl; methoxy; methoxyethyl; cyclopropyl; cyclopropylmethyl; (methylthio)ethyl; 3-methoxypropyl; 3-pyridyl; 2-(3-pyridyl)ethyl; 2-(2-pyridyl)ethyl; 3-pyridylmethyl; 4-pyridylmethyl; 4-pyridylmethyl-N-oxide; 2-pyridazinylmethyl; sulfolan-3-yl; 3-tetrahydrofuranyl; 2-tetrahydrofuranylmethyl; 3-(1-imidazolyl)propyl; 1-t-butoxycarbonyl-4-piperidinylmethyl; 1-t-butoxycarbonyl-4-piperidinylmethyl; 2-(hydroxyimino)propyl; 2-(methoxyimino)propyl; 2-oxo-1-propyl; and



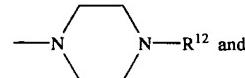
wherein

R^{14} is chosen from H, Cl, F, CN, NO_2 , SO_2NH_2 , CF_3 , COOCH_3 , OCH_3 , OH, SO_2CH_3 , $\text{N}(\text{CH}_3)_2$ and COOH ;

R^{15} is chosen from H, OCH_3 and Cl; and

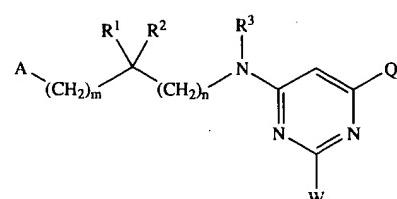
p is 1 or 2.

21. A 4-pyrimidinamine according to claim 19 wherein W is



R^{12} is t-butoxycarbonyl, methoxyacetyl or phenyl.

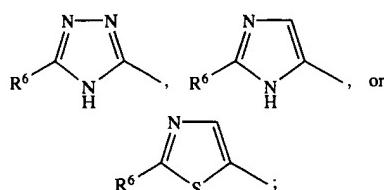
22. A 4-pyrimidinamine according to claim 16 wherein Z is CH;



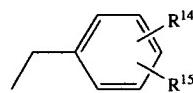
18. A 4-pyrimidinamine according to claim 17 wherein Q is chosen from methylimidazolyl, pyrrolyl, methylpyrrolyl, pyrazolyl, methylpyrazolyl, furanyl, methylfuranyl, thieryl, oxazolyl, thiazolyl, pyridinyl, quinolinyl, 1-methylpyrimidin-2-onyl, phenyl, fluorophenyl, hydroxymethyl, 2-imidazolyl, tetrahydropyranoloxymethyl, imidazolylmethyl, pyrrolylmethyl, $-\text{CH}=\text{N}-\text{OCH}_3$ and

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A is



R^1 is chosen from n-butyl; cyclohexylmethyl; cyclopentylmethyl; 2-methylpropyl; 3-methyl-1-butyl; cyclohexyl; 2,2-dimethylpropyl; benzyl; 2-thienylmethyl; 1-t-butoxycarbonyl-4-piperidinyl; 4-chlorobenzyl; 2-pyranyl methyl; 4-pyranyl methyl; 4-pyranyl and 1,1-dimethylethyl;
 R^2 and R^3 are H;
Q is pyrrolyl;
W is NHR^9 ; and
 R^9 is alkyl, cycloalkyl or

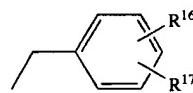


wherein

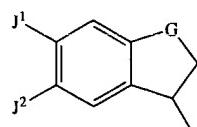
R^{14} is chosen from H, Cl, F, CN, NO₂, SO₂NH₂, CF₃, COOCH₃, OCH₃, SO₂CH₃, N(CH₃)₂ and COOH; and
 R^{15} is chosen from H, OCH₃ and Cl.

23. A pyrimidine according to claim 16 wherein:

A is $R^4R^5N-C(O)-$;
 R^1 is chosen from isopropyl; n-butyl; cyclohexylmethyl; cyclopentylmethyl; naphthylmethyl; cyclohexylethyl; 2-methylpropyl; 3-methyl-1-butyl; cyclohexyl; 2,2-dimethylpropyl; benzyl; 2-thienylmethyl; 1-t-butoxycarbonyl-4-piperidinyl; 4-methoxybenzyl; 4-chlorobenzyl; 3,4-dichlorobenzyl; 2-pyranyl methyl; 4-pyranyl methyl; 4-pyranyl and 1,1-dimethylethyl;
 R^2 , R^3 and R^5 are H;
 R^4 is pyridinyl, pyridinylmethyl, indanyl methyl, furanyl methyl, tetrahydronaphthalenyl, substituted phenyl, or



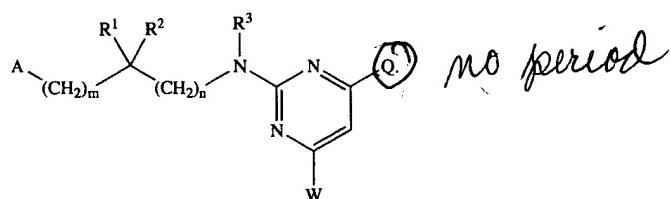
R^{16} is chosen from H, Cl, F, CN, NO₂, SO₂NH₂, CF₃, CH₃, COOCH₃, OCH₃, SO₂CH₃, N(CH₃)₂ and COOH; and

 R^{17} is chosen from H, OCH₃, F and Cl.24. A pyrimidine according to claim 16 wherein R^4 is

25. A pyrimidine according to claim 24, wherein one of J¹ and J² is H and the other is H, Cl or CN and G is chosen from —CH₂—, —CH₂CH₂—, —OCH₂—, —O— and —CH₂N(lower alkyl)—.

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26. A 2-pyrimidinamine according to claim 16, wherein Y is CH, having the formula

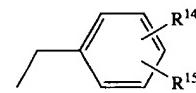


10 27. A 2-pyrimidinamine according to claim 26 wherein Q is chosen from pyrrolyl, pyridinyl, fluorophenyl and 2-thienyl.

28. A 2-pyrimidinamine according to claim 27 wherein

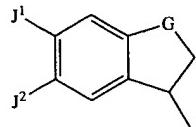
A is $R^4R^5N-C(O)-$;W is H, Cl, NHR^9 or OR⁸;R¹ is chosen from alkyl and C₁-C₃-alkylcycloalkyl;R², R³ and R⁵ are H;R⁴ is C₁-C₄-alkylaryl or C₁-C₄-alkylheteroaryl;R⁸ is C₁-C₄-alkylaryl;R⁹ is chosen from hydrogen, alkyl, fluoroalkyl, (C₁-C₄-alkoxy)alkyl, (C₁-C₄-alkylthio)alkyl, C₁-C₄-alkylcycloalkyl, C₁-C₄-alkylaryl, heterocyclyl, C₁-C₄-alkylheteroaryl, C₁-C₄-alkylheterocyclyl; and

m and n are zero.

29. A 2-pyrimidinamine according to claim 28 wherein W is NHR^9 andR⁹ is

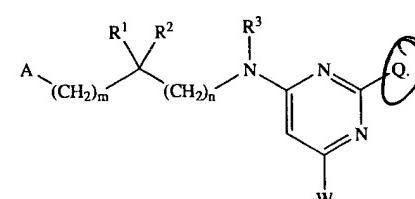
wherein

R^{14} is chosen from H, F, Cl, CN, NO₂, SO₂NH₂, CF₃, COOCH₃, OCH₃, SO₂CH₃, N(CH₃)₂ and COOH; and

 R^{15} is chosen from H, OCH₃ and Cl.30. A 2-pyrimidineamine according to claim 26 wherein R⁴ is

50 one of J¹ and J² is H and the other is H, Cl or CN and G is chosen from —CH₂—, —CH₂CH₂—, —OCH₂—, —O— and —CH₂N(lower alkyl)—.

31. A 4-pyrimidinamine according to claim 16, wherein X is CH, having the formula



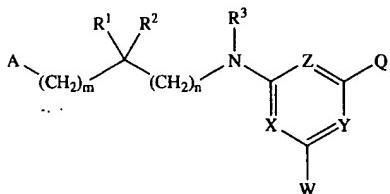
65 32. A 4-pyrimidinamine according to claim 31 wherein Q is pyrrolyl and m and n are zero.

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60. The method of treating pain or hyperalgesia according to claim 59 wherein said cyclooxygenase inhibitor is a selective cyclooxygenase-2 inhibitor.

61. The method of treating pain or hyperalgesia according to claim 59 wherein said cyclooxygenase inhibitor is a selective cyclooxygenase-1 inhibitor.

62. A method of treating post-capillary resistance or diabetic symptoms associated with insulitis comprising administering to a subject in need of such treatment a therapeutically effective amount of a compound of formula I

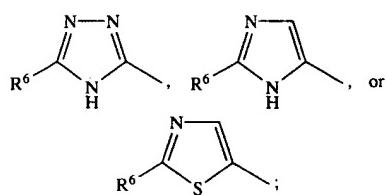


wherein:

two of X, Y and Z are N and the other of X, Y and Z is CH;

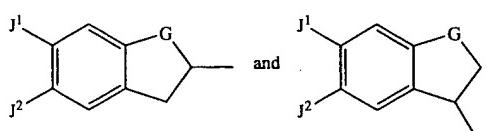
A is A¹ or A²;

A¹ is R⁴R⁵N—(O)—,



A² is chosen from R⁷C(O)NH—, R⁷S(O)₂NH—, R⁴NH—, and R⁴O—;

Q is chosen from heteroaryl, aryl, —CH₂R¹³, —CH=N—OCH₃ and



W is chosen from H, Cl, F, R⁸, C₁-C₄-alkylaryl, —OR⁸, —SR⁸, —NR⁹R¹⁰ and —NHC(O)R¹¹, with the proviso that when Q is imidazolyl, W is not H, Cl, F or R⁸;

R¹ is chosen from alkyl, cycloalkyl, alkenyl, C₁-C₃-alkylcycloalkyl, heterocyclyl, C₁-C₃-alkylheterocyclyl, aryl, C₁-C₃-alkylaryl, heteroaryl, C₁-C₃-alkylheteroaryl, (C₁-C₃-alkyloxy)alkyl, (C₁-C₃-alkyloxy)cycloalkyl, (C₁-C₃-alkylthio)alkyl, (C₁-C₃-alkylthio)cycloalkyl and (C₁-C₃-alkylsulfonyl)alkyl;

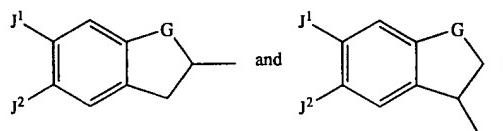
R² is H or C₁-C₃-alkyl, or R¹ and R² taken together form a 5- to 7-membered ring structure optionally containing O, S or NR¹²;

R³ is H or C₁-C₆-alkyl, or, when n is zero, R² and R³ taken together may form a 6-membered ring, which may be fused to a six-membered saturated or aromatic carbocycle;

R⁴ is chosen from H, aryl, heteroaryl, C₁-C₄-alkyl substituted with one to three aryl or heteroaryl

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residues,



wherein J¹ and J² are independently chosen from H, F, Cl, CN, NO₂ and CH₃ and G is chosen from —CH₂—, —CH₂CH₂—, —CH₂CH₂CH₂—, —OCH₂—, —CH₂O—, —CH₂CH₂O—, —OCH₂CH₂—, —O—, —N(lower alkyl)-, —N(lower alkyl)CH₂—, —CH₂N(lower alkyl)-, —S—, —SO—, —SO₂—, —CH₂S—, —SCH₂—, —CH₂SO—, —SOCH₂—, —CH₂SO₂—, and —SO₂CH₂—;

R⁵ is H or C₁-C₃-alkyl, with the proviso that both R³ and R⁵ cannot be alkyl;

R⁶ is aryl;

R⁷ is aryl or C₁-C₃-alkylaryl;

R⁸ is chosen from alkyl, aryl, heteroaryl, substituted alkyl, C₁-C₄-alkylaryl, C₁-C₄-alkylheterocycl and C₁-C₄-alkylheteroaryl;

R⁹ is chosen from H, alkyl, alkenyl, substituted alkyl, cycloalkyl, aryl, alkoxy, heteroaryl, fluoroalkyl, C₁-C₄-alkylcycloalkyl, (C₁-C₄-alkoxy)alkyl, (C₁-C₄-alkoxycarbonyl)alkyl, (C₁-C₄-alkylthio)alkyl, heterocyclyl, C₁-C₄-alkylheterocycl, C₁-C₄-alkylaryl, and C₁-C₄-alkylheteroaryl;

R¹⁰ is H or C₁-C₃-alkyl; or

R⁹ and R¹⁰ taken together may form a 5- to 7-membered ring structure optionally containing O, S, SO, SO₂ or NR¹², said ring optionally substituted with —OH, —CN, —COOH or —COOCH₃;

R¹¹ is aryl;

R¹² is chosen from H, C₁-C₃-alkyl, alkoxycarbonyl, methoxyacetyl and aryl;

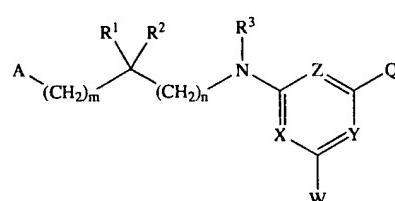
R¹³ is chosen from —OH, —OTHP, 1-imidazolyl, and 1-pyrrolyl;

m is zero or one; and

n is zero or one, with the proviso that when A is A², m and n cannot both be zero.

63. The method according to claim 62 wherein said diabetic symptoms associated with insulitis comprise hyperglycemia, diuresis, proteinuria and increased nitrile and kallikrein urinary excretion.

64. A method of treating edema comprising administering to a subject in need of such treatment a therapeutically effective amount of a compound of formula I



wherein:

two of X, Y and Z are N and the other of X, Y and Z is CH;

A is A¹ or A²;